

GVNW Consulting, Inc.  
Comments in ET Docket No. 04-295  
November 8, 2004

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Communications Assistance for	)	ET Docket No. 04-295
Law Enforcement Act and	)	
Broadband Access and Services	)	RM – 10865

**COMMENTS OF GVNW CONSULTING, INC.**

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Summary of Comments

GVNW has some serious concerns about the impact on rural carriers of some of the methods proposed in the instant NPRM.

In the current NPRM, it is proposed that the carrier be required to implement CALEA functionality in the absence of both standards and available equipment. While a large carrier may perhaps have the resources to accomplish this, it is absurd to believe that any ILEC or ISP with less than 50,000 customers has the resources to develop and deploy its own CALEA solution in the absence of one being available from its equipment vendors. Similarly, it is not realistic to believe that a large equipment vendor, such as Nortel or Cisco, would negotiate with such small carriers to develop a custom CALEA solution when the vendor has not yet developed a solution for their overall market.

In the NPRM, it is stated that carriers received CALEA upgrade functionality from equipment vendors for “nominal cost”. This has not been the experience of rural carriers, where CALEA functionality was tied to expensive software operating system and hardware upgrades by the vendors. This may have led to the misconception that CALEA upgrade costs are of little consequence to small carriers, when just the opposite is true.

In discussing time frames for deployment, we respectfully request that the Commission consider that, while the CALEA statute and the intent of Congress was that CALEA should be deployed in a timely fashion at a reasonable cost, it was not that CALEA should be deployed without **any** regard to cost.

The current Flexible Deployment program is working well in rural areas. This program should be continued for rural carriers for circuit mode, and reinstated for packet mode as the most realistic and cost effective way to obtain CALEA compliance.

### Introduction and Background

GVNW Consulting, Inc. (GVNW) is a management consulting firm that provides a wide variety of consulting services, including regulatory support on issues such as CALEA compliance, universal service, advanced services, and access charge reform for communications carriers in rural America. In this Notice of Proposed Rulemaking (NPRM) (FCC 04-187) proceeding, the Commission has requested comments regarding specific aspects of its “thorough examination of the appropriate legal and policy framework of the Communications Assistance for Law Enforcement Act (CALEA)”.

GVNW applauds the Commission’s attempts to speed the deployment of CALEA in the ongoing interest of national security. It is vital that law enforcement agencies have readily available both appropriate and **cost-effective** tools to assist in the surveillance necessary for this endeavor. That being said, GVNW has some serious concerns about the impact on rural carriers of some of the methods proposed to accomplish this goal as stated in the NPRM. In our comments, we will focus on the “real world” issues of what might actually be accomplished at a reasonable cost to ratepayers, law enforcement, and the public; and the need for deployment in rural areas where there have been few to no requests for surveillance in many locations.

## A RURAL PERSPECTIVE ON THE CHALLENGE OF IMPLEMENTING CALEA

The NPRM discusses the carrier's responsibility to implement CALEA. There is little argument that it is currently the responsibility of carriers to implement CALEA per the CALEA statute. However, a major change is proposed in the way this deployment is to be accomplished.

Currently, the CALEA implementation process is that the industry standards bodies develop standards, manufacturers develop products, and carriers deploy these products. In the current NPRM, it is proposed that the carrier be required to implement CALEA functionality in the absence to both standards and available equipment. While a large carrier may perhaps have the resources to accomplish this, it is absurd to believe that an ILEC or ISP with less than 50,000 customers has the resources to develop and deploy its own CALEA solution in the absence of one being available from its equipment vendors.

Similarly, it is not realistic to believe that a large equipment vendor, such as Nortel or Cisco, would negotiate with such small carriers to develop a custom CALEA solution when the vendor has not yet developed a solution for their overall market. And, even if negotiations could be started, it is not realistic to assume that the small carrier has the resources to pay for any solution developed in this manner.

Another example of why the approach suggested in the NPRM is problematic is found in the recent activity related to packet mode waivers. In GVNW's January, 2004 filings for extensions of packet mode waivers on behalf of our clients, we submitted letters from most of the vendors that provided Internet equipment to our clients. These

letters were submitted to show that we had negotiated in good faith with our vendors to obtain CALEA compliant equipment. While most vendors replied to our requests, some chose not to. In most of the replies we did receive, the letters the vendors sent were form letters sent to all small customers requesting them. Neither GVNW nor the client was able to secure any additional commitment from any vendor to develop a CALEA solution specifically for any of the small carriers beyond what is expressed in these letters. We have included an example in the Attachments of a sample petition so as to show the requests made of vendors and the vendor responses received.

In looking at what can actually be accomplished, one must ask: "If the large equipment vendors, with the resources at their disposal, have not been able to develop a CALEA solution, how can a small carrier, given its much smaller resources, do so?"

The current Flexible Deployment program has worked well in rural areas. It has allowed deployment of CALEA on a time frame that is consistent with upgrade schedules of small carriers. In discussing time frames for deployment, we respectfully request that the Commission consider that, while the CALEA statute and the intent of Congress was that CALEA should be deployed at a reasonable cost, it was not that CALEA should be deployed without **any** regard to cost.

## THE NPRM MISSTATES SMALL CARRIER COSTS

As a matter of public policy, we respectfully submit that the Commission would be well advised to consider that in many cases, due to the high cost of the upgrades required for CALEA compliance, it is often more economical over a five or ten-year service life for a small carrier to replace its current switching equipment, circuit or packet, rather than upgrade the legacy equipment. In this comment filing, we will address only a perspective of circuit mode history, as there is not yet adequate history and understanding of capabilities on the part of small carriers to address Packet Mode situations.

In the NPRM at paragraph 19, it is not an entirely accurate to allege that “manufacturers ...develop software that carriers receive at a nominal charge”. While it may be partially correct that the CALEA software feature has been provided to carriers by manufacturers at a nominal charge, what is not considered here is that most TDM switch vendors tied the availability of the CALEA feature to very expensive upgrades of the underlying operating software. We have provided, in Attachment B, several illustrative examples of real-life CALEA costs and requests for electronic surveillance by law enforcement for several GVNW clients. In all the situations shown, as well as some other rural areas experiencing static growth or decline in access lines and no demand for services beyond POTS and basic custom calling features, that are the operating system upgrade did not provide any other features or functions that were needed by the carrier or its customers other than CALEA. Thus, the operating system upgrade cost, while not technically a direct cost of CALEA, must be incurred by the carrier only to provide

CALEA functionality. This does not appear to have been considered in determining the actual cost of CALEA to carrier ratepayers<sup>1</sup>.

GVNW is concerned that the Commission may not be receiving correct and accurate information on the true costs of CALEA to carriers and their ratepayers. For example, in Paragraph 82 of the NPRM, it is stated: "We determined that the post-connection dialed digits were reasonably available...without significantly modifying a carrier's network by installing additional tone decoders." In fact, the Nortel DMS 10 switching platform, widely deployed in all rural areas, did require the installation of additional tone decoders to accomplish collection of post-dialed digits. This has been recognized by the FBI CALEA Implementation Section (CIS) in their request that the Appendix D – Fourth Addition address the presence or absence of these tone decoders in all DMS 10 switches. Due to the ramp-up to manufacture these tone decoders in quantity, they were not available to most small carriers in time to meet the June 30, 2002 deadline for filing waiver requests. Because of this, many petitions for waiver were filed for DMS 10 switches. These requests for waiver were withdrawn when the tone decoder equipment became available and was installed in the switches. And, as with the CALEA software discussed above, the tone decoders only functioned with certain types of switch hardware. If the carrier did not have this hardware, expensive upgrades were required to accommodate the tone decoders.

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<sup>1</sup> That this confusion exists is not surprising, as the discontinuity between what was promised and what was actually delivered on many circuit mode switches is not a subject that some vendors desire to have discussed in any public forum.



The experience with the tone decoder addition shows that the current Flexible Deployment program is working well in rural areas, and is achieving CALEA compliance at a rate that is economical to ratepayers and consistent with the demand for electronic surveillance in rural areas as shown in Attachment B. Flexible deployment should be continued in rural areas for circuit mode, and reinstated for packet mode as the most realistic and cost effective way to obtain CALEA compliance.

#### TRUSTED THIRD PARTY ISSUES

In the NPRM, the Commission requests comments on the provision of CALEA compliance by “trusted third parties”. In this section, the FCC mentions both Fiducianet and Verisign as companies that provide this service. At the request of several client companies, GVNW has started to perform some initial review of both companies’ offerings in this area. To this end, GVNW has requested of both these companies a fee schedule and a list of carrier network requirements necessary to implement this service at rural carriers.

In the course of this initial review, we found that the current solution from Verisign functions in the circuit mode only for switches that are CALEA compliant unless an adjunct device and special routing in the switch is utilized. With additional equipment at the ISP location, it may be a viable packet mode solution where there is no compliant equipment available. GVNW is waiting for further specifications at the time of these comments to determine which Verisign solutions may be applicable to our clients. Verisign did provide some pricing to GVNW, and has stated that they will continue to negotiate in this area. GVNW is evaluating the Verisign information we

currently have as an option in deploying CALEA in a “third party” mode, especially where it is very costly or not possible to implement a CALEA solution through modifications to the carrier’s embedded network. GVNW plans to continue discussions with Verisign regarding this possible route to compliance.

While we are dismayed to report the following results, and while it is possible that we have not yet found the appropriate point of contact, Fiducianet refused multiple requests to provide GVNW with pricing, stating a concern that the pricing will be used in a negative context in comments in this proceeding. This leads one to question just how “trusted” a party can be who asks the FCC to impose their solution on carriers, then refuses to divulge the pricing of this very service to these same carriers.

Such concerns are further reinforced when the FBI’s own public statements concerning third parties is added to the debate. In his comments before the House of Representatives<sup>2</sup>, Marcus C. Thomas states in part: “I liken third-party services to other out-sourced services such as payroll administration, where the third party handles the paperwork, **but the buck stops with the company that pays the bill.**” (emphasis added)

We agree with the Deputy Assistant Director that the buck stops with the carrier. That being said, any **potential “trusted”** third-party provider has an implicit duty to provide pricing information when properly requested, as was the case with Fiducianet.

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<sup>2</sup> Statement for the Record of Marcus C. Thomas, Deputy Assistant Director, Investigative Technology Division, Federal Bureau of Investigation, Before the United States House of Representatives Committee on Energy and Commerce, Subcommittee on Telecommunications and the Internet, September 8, 2004.

## THE IMPORTANCE OF CALEA BEING TECHNOLOGY NEUTRAL

GVNW has concerns that the CALEA requirements are not being applied equally to all carriers, and may provide safe havens for criminals to avoid the possibility of surveillance. Leaving peer-to-peer VoIP providers exempt may provide this safe haven. All carriers, regardless of technology, should be required to provide CALEA capability. The FCC need look no further than the attempts by the music industry to quash music file swapping over the Internet. When Napster ceased to be a viable file-swapping alternative, swappers migrated to other services, most of them being, ironically, peer-to-peer systems. It can be expected that a similar situation will occur if the Commission does not include all carriers, regardless of technology, under the CALEA umbrella.

Respectfully submitted,

Electronically submitted through ECFS on 11/8/04

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#### Attachments

A – Cost of TDM upgrades – sample data from selected GVNW clients. This is available with the paper copy filing.

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B – January, 2004 Packet mode filing– sample filing provided. This is available with the paper copy filing.